

PATENT SPECIFICATION



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226,264

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COMPLETE SPECIFICATION.

Window Fastener.

I, DAVID JOHN THOMAS, of 44, Brynmor Road, Llanelli, in the County of Carmarthen, British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention consists of a new or improved window fastener of the type wherein a screwed bolt is passed through the frame of the upper and lower sashes.

It has long been the practice in many instances, to fasten windows in the following manner. A threaded bolt is passed through a hole in the top bar of the bottom sash (hereinafter called the near bar) with a loose sliding fit. A corresponding hole is made in the bottom bar of the top sash (hereinafter called the distant bar) and a plate with a threaded hole is screwed over the hole in this bar. When the window is closed, the threaded bolt is screwed in, and the two bars of the upper and lower sash are drawn together. This type of fastening has one or two serious defects. It is sometimes found that difficulty is experienced in causing the thread of the bolt to engage with that of the plate on the distant bar and in one form of the invention I may remedy this. Furthermore, in order to open the window, the threaded bolt has to be removed, and may become mislaid.

I am aware that window fasteners have been proposed embodying a screwed socket on one bar, and a holder on the second bar formed in two semicylindrical halves united to form a cylinder or tube, accommodating a bolt, an enlarged part of the bore so formed accommodating a stop-flange formed on the bolt.

With my invention however, it is not necessary to provide a flange on the bolt and considerable waste of material and cost is thus to be saved. In another pro-

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posal, a bolt has two threaded portions, one of greater diameter than the other, the difference forming a shoulder which acts as a withdrawal stop. My device operates differently in that it has but one thread, and is simpler.

My invention has among its objects, means for remedying these defects, which means I will now proceed to describe, with reference to the accompanying sheet of drawings.

The present invention consists broadly in the provision of a bolt which, by reason of a part having a reduced diameter co-operating with a member such as a flange, or a constricted part, in a tube through which the bolt passes, cannot be accidentally withdrawn altogether. The drawings suffice to show this feature more fully.

Fig. 1 is a sectional view of a fastener attached to a window, the bolt being in the unlocked position.

Fig. 2 is a front view, screwed home.

Fig. 3 is a view similar to Fig. 1 of a modified fastener.

Fig. 4 is a front view looking at the distant bar, in the modified form.

A brass or other metal tube 1 contains a bolt 2 of greater length. This bolt is threaded for part of its length and has a head 3 and such threaded portion 2^A engages with a threaded nut or plate 4. The remainder of the bolt 2 is plain, and, being equal in overall diameter to the threaded portion 2^A, it cannot be withdrawn entirely from the tube 1. The effect of unscrewing it is simply to withdraw the otherwise projecting part of the bolt 2 into the tube 1.

When the bolt 2 is again screwed home, in one form the plain part of it projects beyond the further end of the tube 1 as in Fig. 1, and in the other form the threaded part 2^A projects beyond the further end of the tube 1 as in Fig. 2. For facilitating assembly, the

head 3 is not affixed to the bolt 2 until after the latter has been inserted into the tube 1 from the further end. The length of the tube 1 is about equal to the thickness of the near bar 5 of the window into which it is intended to be housed.

In applying a fastener according to my invention to a window of the sash type as illustrated a transverse hole is made through the near bar 5, and the tube 1 inserted tightly therein, where it is secured by two or more screws through the threaded nut or plate 4 attached to one end of the tube. A corresponding hole or holes is or are made in the distant bar 6, and a metal plate 7 or 8 (Fig. 4) having a hole of slightly greater diameter than the non-threaded portion of the bolt (as in Fig. 1) or with a series of threaded holes 9 (Fig. 4) is screwed over the hole or holes, in the distant bar. When the window is closed, a few turns of the head 3 of the bolt will suffice to fasten the window. Any number of such fasteners may be used on each window if desired.

Fasteners such as I have described, may also be used for holding the sashes open to a desired extent, for which purpose they may be fixed at one or each side of the lower sash, on the near side bars, and caused to engage in corresponding holes 9 in the distant upper sash side bars. These upper sash side bars have a series of holes in this case, so that the window may be fastened in any position, for ventilation purposes reducing the risk of damage or injury due to the cords of the sash breaking. As an alter-

native to providing holes in the near and distant bars, as described, the tube 1 may be secured on the top of the near sash 5 in any suitable manner, and a socket piece or eye can be provided on the further sash 6.

In the form shown in Figs. 3 and 4 a constricted portion as shown in the drawing, passes through an annular flange 1^A made integral with the tube 1, thus preventing removal by the bolt accidentally. The flange in Fig. 2 forms virtually a constriction of the tube, as does the threaded part in Fig. 1.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

A window fastener of the type described comprising a threaded bolt adapted to engage with both near and distant bars, said bolt having a portion of reduced radius passing through a constricted part of the tube in which the bolt is carried in the near bar, preventing withdrawal of the bolt from said tube, substantially as described.

Dated this 5th day of June, 1924.

For the Applicant,
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Reference has been directed in pursuance of Section 7, Sub-section 4, of the Patents and Designs Acts, 1907 and 1919, to Specifications No. 15,701 of 1897 and No. 22,580 of 1893.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1925.

[This Drawing is a reproduction of the Original on a reduced scale.]

FIG. 1.

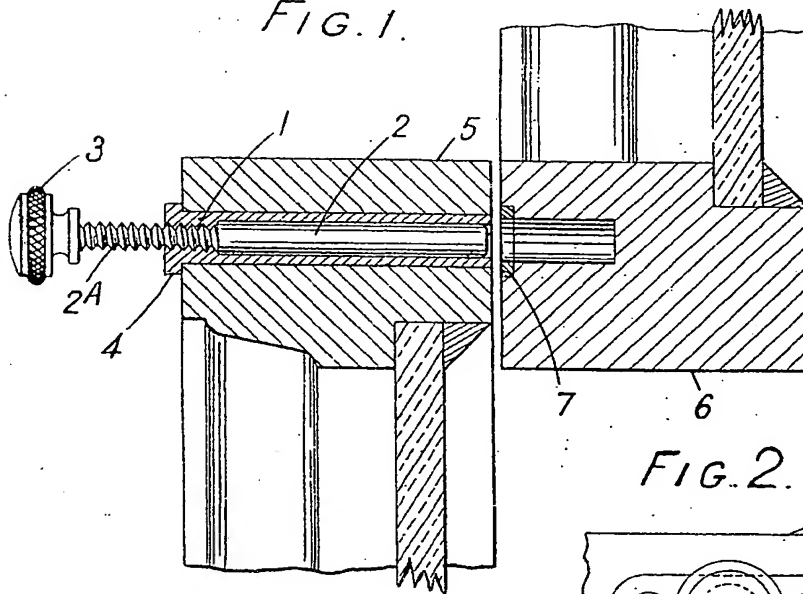


FIG. 2.

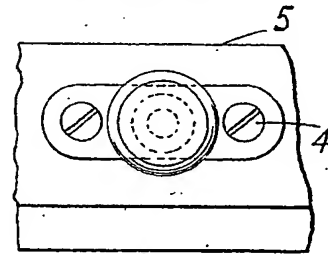


FIG. 3.

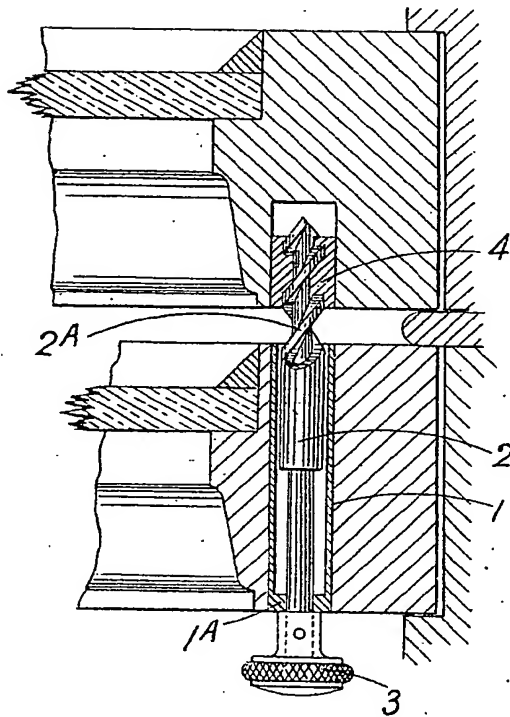
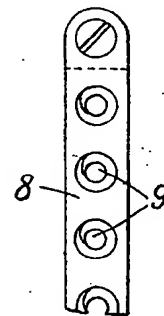


FIG. 4.



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